

MULTI-CHIP STACK AND METHOD OF FABRICATION  
UTILIZING SELF-ALIGNING ELECTRICAL CONTACT ARRAY

Abstract of the Disclosure

5           A multi-chip stack structure and method of fabrication  
are provided utilizing self-aligning electrical contact  
arrays. Two or more arrays of interconnection contacts are  
provided, with one array being a rough aligned contact  
array, and a second array being a high bandwidth contact  
10       array. The rough aligned contact array has larger contacts  
and at least a portion thereof which melts at a  
substantially lower temperature than the melting temperature  
of the contacts of the high bandwidth contact array. By  
positioning two integrated circuit chips in opposing  
15       relation with the arrays mechanically aligned therebetween,  
and applying heat to melt the contacts of the rough aligned  
array, the two chips will rotate to align the respective  
contacts of the high bandwidth contact arrays, thereby  
achieving improved connection reliability between the  
20       structures.